

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Complete if Known	
				Application No.	09/853,556
				Filing Date	May 11, 2001
				First Named Inventor	Laurence J. Newell
				Art Unit	2633
				Examiner Name	Jason Chan
Sheet	1	of	1	Attorney Docket Number	20852-05134

MAY 14 2003
JC26 E
U.S. PATENT & TRADEMARK OFFICE

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No. ¹	Document No.	Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
<i>AB</i>	1	US-5,481,542	01-02-1996	Logston et al.
<i>AB</i>	2	US-5,612,806	03-18-1997	Su et al.

FOREIGN PATENT DOCUMENTS				
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
<i>AB</i>	3	JP09022038 A	01-21-1997	Kokusai Electric Co Ltd
<i>AB</i>	4	JP09098155 A	04-08-1997	Matsushita Electric Ind Co Ltd.

OTHER REFERENCES – NON-PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published		
<i>AB</i>	5	Blumenthal, Daniel J. et al., "Fiber-Optic Links Supporting Baseband Data and Subcarrier-Multiplexed Control Channels and the Impact of MMIC Photonic/Microwave Interfaces," <i>IEEE Transactions on Microwave Theory and Techniques</i> (August 1997), Vol. 45, No. 8, pages 1443-1451.		
<i>AB</i>	6	Liew, Soun C. et al., "A Broad-Band Optical Network Based on Hierarchical Multiplexing of Wavelengths and RF Subcarriers," <i>Journal of Lightwave Technology</i> (November 1989), Vol. 7, No. 11, pages 1825-1838.		

RECEIVED

MAY 15 2003

Technology Center 2600

Examiner Signature	<i>ABellk</i>	Date Considered	<i>9/20/03</i>
--------------------	---------------	-----------------	----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

FORM PTO-1449 (REV. 6-89)	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office	Attorney's Docket No. 20852-05134	Serial No. 09/853,556
INFORMATION DISCLOSURE CITATION		Applicant Laurence J. Newell et al.	
(Use several sheets if necessary)		Filing Date May 11, 2001	Group Art Unit 2874

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
AB	4,061,577	12/6/77	Bell	250	199	8/18/76
AB	4,701,904	10/20/87	Darcie	370	3	
AB	4,953,156	8/28/90	Olshansky et al.	370	3	9/8/88
AB	5,351,148	9/27/94	Maeda et al.	359	124	5/26/93
AB	5,387,927	2/7/95	Look et al.	348	6	9/17/93
AB	5,430,568	06/04/95	Little et al.	359	124	
AB	5,461,612	10/24/95	Göckler, et al.	370	55	10/24/94
AB	5,559,561	9/24/96	Wei	348	470	7/15/94
AB	5,576,874	11/19/96	Czerwiec et al.	359	123	
AB	5,596,436	1/21/97	Sargis et al.	359	132	7/14/95
AB	5,680,238	10/21/97	Masuda	359	132	11/9/95
AB	5,878,088	03/02/99	Knutson et al.	375	324	04/10/97
AB	A 5,956,165	09/21/99	Fee et al.	359	118	09/12/97
AB	6,078,412	06/20/00	Fuse et al.	359	124	10/03/96
AB	6,118,566	09/12/00	Price	359	181	11/04/98

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
AB	EP 0 717 521 A	06/19/96	EP				No
AB	EP 0 756 393 A1	01/29/97	EP				No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AB	Alcatel, "Alcatel 1680 SM 10 Gbps (STM-64) Add Drop Multiplexer", copyright 1997 (printed from http://www.alcatel.com/telecom/mbd/products/products/1680sm.htm on May 24, 1999), pp. 1-4
AB	Alcatel, "Alcatel 1692 SM 10 Gbps (OC-192) SONET Transport System", copyright 1997 (printed from http://www.alcatel.com/telecom/mbd/products/products/1692.htm on May 24, 1999), pp. 1-2
AB	Alcatel, "The OPTINEX Family of Network Elements", copyright 1997 (printed from http://www.alcatel.com/telecom/tsd/products/family.htm on May 24, 1999), pp. 1-7

EXAMINER	AB	DATE CONSIDERED	9/20/03
EXAMINER: Initial if references considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Sheet 1 of 1 Attorney Docket Number 20852-05134

Complete if Known

Application No.	09/853,556
Filing Date	May 11, 2001
First Named Inventor	Laurence J. Newell
Art Unit	2633
Examiner Name	Jason Chan

U.S. PATENT DOCUMENTS				
		Document No.		
Examiner Initials*	Cite No. ¹	Number – Kind Code ² (if known)	Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
JB	1	US-6,078,412 A	06-20-2000	Fuse et al.
				RECEIVED MAY 27 2003

FOREIGN PATENT DOCUMENTS					Technology Center 2600
		Foreign Patent Document			
Examiner Initials*	Cite No. ¹	Country Code ³ – Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	T ⁶

OTHER REFERENCES – NON-PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ⁶

Examiner Signature	<i>Abell</i>	Date Considered	9/20/03
--------------------	--------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

FORM PTO-1449 (REV. 6-89)		U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office		Attorney's Docket No. 20852-05134	Serial No. 09/853,556
INFORMATION DISCLOSURE CITATION		Applicant		Laurence J. Newell et al.	
		Filing Date May 11, 2001		Group Art Unit 2874	
(Use several sheets if necessary)					

U.S. PATENT DOCUMENTS

Examiner Initial	TRADEMARK OFFICE O I P E 07 02 2001	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>A3</i>	Park, J., A. Elrefaie, K. Lau, "1550-nm Transmission of Digitally Modulated 28-GHz Subcarriers Over 77 km of Nondispersion Shifted Fiber", <u>IEEE Photonics Technology Letters</u> , February 1997, Volume 9, Issue 2, pp. 256-258
<i>A3</i>	Ryan, J., "WDM: North American Deployment Trends," <u>IEEE Communications Magazine</u> , February 1998, pp. 40-44.
<i>A3</i>	Schlump, Dieter et al.: "Electronic equalization of PMD and chromatic dispersion induced distortion after 100 km standard fibre at 10 Gbit/s" <u>PROCEEDINGS OF THE EUROPEAN CONFERENCE ON OPTICAL COMMUNICATION</u> , 20 September 1998, pp. 535-536.
<i>A3</i>	Swaminathan, V., N. Froberg, L. Upadhyayula, "The end-to-end bit error performance of 64-quadrature amplitude modulated signals in a hybrid AM-vestigial sideband/QAM fiber-optic video transmission system", <u>Proceedings of SPIE-International Society for Optical Engineering</u> , Volume 2917, pp. 274-282
<i>A3</i>	Tai, C., Pi-Yang Chiang, W. Way, "Eight-Way, 70-km Transmission of 33-Channel 64-QAM Signals Utilizing a 1.3- μ m External Modulation System and Semiconductor Optical Amplifier", <u>IEEE Photonics Technology Letters</u> , Vol. 8, No. 9, September 1996, pp. 1244-1248
<i>A3</i>	Tang, D., "Multi-Gigabit Fiber-Optic Video Distribution Network Using BPSK Microwave Subcarriers", <u>IEEE 1989 MTT-S Intl. Microwave Symp Digest</u> , June 13-15, 1989, Long Beach, CA, Volume 2, pp. 697-701
<i>A3</i>	Wilson, G., "Capacity of QAM SCM systems utilising optically linearised Mach-Zehnder modulator as transmitter", <u>Electronic Letters</u> , Vol. 34, No. 25, December 10, 1998, pp. 2372-2374
<i>(scratches)</i>	

EXAMINER	<i>A3</i>	DATE CONSIDERED	<i>7/20/03</i>
EXAMINER: Initial if references considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

FORM PTO-1449 (REV. 6-89)		U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office		Attorney's Docket No. 20852-05134	Serial No. 09/853,556		
INFORMATION DISCLOSURE CITATION <i>TYPE</i> <i>OCT 12 2001</i> <i>SEARCHED</i> <i>INDEXED</i> <i>MAILED</i>				Applicant Laurence J. Newell et al.			
				Filing Date May 11, 2001	Group Art Unit 2874		
U.S. PATENT DOCUMENTS							
Examiner Initial <i>AB</i>	Document Number	Date	Name		Class	Subclass	Filing Date If Appropriate
FOREIGN PATENT DOCUMENTS							
	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
<i>AB</i>	Jones-Bey, H., "Optical switches pursue crossconnect markets," <i>Laser Focus World</i> , May 1998, pp. 153-162.						
<i>AB</i>	Kanno, N., K. Ito, "Fiber Optic Subcarrier Multiplexing Transport for Broadband Subscriber Distribution Network", <i>IEEE Intl. Conference on Communications Boston ICC/89 World Prosperity Through Communications</i> , June 11-14, 1989, Boston, MA, Volume 2, pp. 996-1003						
<i>AB</i>	Kavehrad, M., E. Savov, "Fiber-Optic Transmission of Microwave 64-QAM Signals", <i>IEEE Journal on Selected Areas in Communications</i> , Vol. 8, No. 7, September 1990, pp. 1320-1326						
<i>AB</i>	Kitayama, Ken-ichi, "Subcarrier Multiplexing Based Signaling and Access Control in Optical FDM Networks", <i>IEEE Global Telecommunications Conference (GLOBECOM'95, Singapore)</i> , Nov. 1995, pp. 1996-2002						
<i>AB</i>	LeBer, J., M. LeLigne, "Digital Transmission on Electric Subcarriers in Optical Fiber Videocommunication Systems", <i>Optics Communications</i> , October 15, 1987, Volume 64, No. 2, pp. 120-126						
<i>AB</i>	Li, J., K. Yano, "Development of AM/QAM Hybrid Optical SCM Transmission System", <i>Proc Intl Conf. On Communication Technology ICCT '96</i> , May 5-7, 1996, Beijing, China, Volume 1, pp. 575-577						
<i>AB</i>	Lu, X., G.E. Bodeep, T.E. Darcie, "Broad-Band AM-VSB/64 QAM Cable TV System Over Hybrid Fiber/Coax Network," <i>IEEE Photonics Technology Letters</i> , Vol. 7, No. 4, April 1995, pp. 330-332						
<i>AB</i>	Nakamura, Y., H. Ohtsuka, S. Aikawa, H. Takanashi, "Advanced Techniques for Super Multi-Carrier Digital Microwave Radio With Trellis-Coded 256 QAM Modulation", <i>NTT Radio Communication Systems Laboratories</i> , pp. 389-394						
<i>AB</i>	Nishikido, J. et al., "Multiwavelength Securely-Authenticated Broadcast Network" 11 th International Conference on Integrated Optics and Optical Fibre Communications, 23 rd European Conference on Optical Communications IOOC-ECOC 97 (Conf. Publ. No. 448), Sept. 22, 1997, pp. 17-20						
<i>AB</i>	Nortel, "S/DMS Transport Node OC-192 System," Issue 1, September 25, 1995, pp. 1-25						
<i>AB</i>	Ohtsuka, H., O. Kagami, S. Aikawa, H. Takanashi, "256-QAM Subcarrier Transmission for Broadband Distribution Networks", <i>NTT Radio Communications Systems Laboratories, GlobeCom '91</i> , pp. 1817-1822						
EXAMINER <i>AB</i>			DATE CONSIDERED <i>8/20/03</i>				
EXAMINER: Initial if references considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

FORM PTO-1449 (REV. 6-89)		U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office		Attorney's Docket No. 20852-05134	Serial No. 09/853,556
INFORMATION DISCLOSURE CITATION					
(Use several sheets if necessary)					
Applicant Laurence J. Newell et al.					
Filing Date May 11, 2001					
Group Art Unit 2874					

OCT 02 2001

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate

U.S. PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AB	Business Wire, "Harmonic Lightwaves Announces Availability of First MCNS-Compliant QAM Modulator; TRANsend QAM is a Vital Component for Delivering Digital Services", November 18, 1997
AB	Cambrian Systems Corporation, "OPTera Metro Optical Networking Platform Product Information," copyright 1997 (printed from http://www.cambriansys.com/productinfo.htm on May 24, 1999), pp. 1-4
AB	Dai, H., C. Lin, M. Ramachandran, "Hybrid AM/QAM Video Trunking Lightwave Systems With Cascaded EDFAs", <u>Conf. Proc. LEOS</u> , 97 Annual Meeting, IEEE Lasers & Electro Optic Society, 1997, Vol. 1, pp. 319-320
AB	Douverne, E., M. Ottka, K. Ruthemann, K. Siegel, "Ein 64-QAM-Modem für SDH-Richtfunkgeräte mit integriertem Kreuzpolarisationsentkoppler", Vol. 40, No. 11, 1 March 1994, pages 89-100
AB	Fujitsu Network Communications, Inc., "Flash-192 Fujitsu Lightwave Add/Drop Multiplexer," copyright 1997 (printed from http://www.fnc.fujitsu.com/technology/falsh192.htm on May 24, 1999), pp. 1-4
AB	Fuse, M., Y. Kudo, K. Maeda, "Development of 128 Optical Distribution System of 150 chs AM/QAM Hybrid Signals", <u>Electronics and Communications in Japan</u> , November 1996, Volume 79, Issue 11, Part 1, pp. 65-77
AB	Green, P., "Fiber Optic Networks", 1993, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, p. 331, line 4 - line 7, figure 9-1
AB	Hiramatsu, A. et al., "Hypermedia Photonic Information Network Based on WDM-SCM Broadcast and Select Switching," Conference Proceedings, Leos '96 9 th Annual Meeting, IEEE Lasers and Electro-Optics Society 1996 Annual Meeting (Cat. No. 96CH35895), Boston, MA, November 18-19, 1996, pp. 312-313
AB	Hitachi Telecom (USA) Inc., "OC-192 AMN5192 Sonet Node," July 1998, pp. 1-2
AB	Ho, K., H. Dai, C. Lin, "Hybrid WDM Digital Trunking System for both HFC and FTTC Access Networks", Digest IEEE/LEOS 1996 Summer Topical Meetings (Cat. No. 96 th 8164), NY, NY, pp. 37-38
AB	I-Cube, "Designing a Large Crosspoint With Fast Reconfiguration", Literature #D-22-013, September 1997, pp. 1-9
AB	I-Cube, "IQX Family Data Sheet", January 1999, pp. 1-58
AB	I-Cube, "Optimal I/O Assignment in an IQX-based Crossbar Switch", Literature #D-21-019, September 1997, pp.1-14

EXAMINER <u>ABellu</u>	DATE CONSIDERED <u>9/20/03</u>
EXAMINER: Initial if references considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered.	
Include copy of this form with next communication to applicant.	